Lifecycle Controller (LC) Management Profile

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Lifecycle Controller (LC) Management

1 Scope

The Lifecycle Controller (LC) Management Profile extends the management capabilities of referencing profiles by adding the capability to represent the configuration attributes for the Dell Lifecycle Controller. The LC configuration attributes are modeled as attribute collections for an individual LC; typically there is one LC per system platform. This profile is a specialization of the BIOS Management Profile.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

2.1 Approved References

DMTF DSP1033, *Profile Registration Profile 1.0*

DMTF DSP1061, *BIOS Management Profile 1.0*

DELL, *Job Control Profile 1.0.0*

DMTF DSP0004, *CIM Infrastructure Specification 2.3*

DMTF DSP1000, *Management Profile Specification Template*

DMTF DSP1001, *Management Profile Specification Usage Guide*

2.2 Other References

ISO/IEC Directives, Part 2, *Rules for the structure and drafting of International Standards*, http://isotc.iso.org/livelink/livelink.exe?func=ll&objId=4230456&objAction=browse&sort=subtype

Unified Modeling Language (UML) from the Open Management Group (OMG), http://www.uml.org

3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1
can
used for statements of possibility and capability, whether material, physical, or causal

3.2
cannot
used for statements of possibility and capability, whether material, physical, or causal

3.3
conditional
indicates requirements to be followed strictly in order to conform to the document when the specified conditions are met

3.4
mandatory
indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

3.5
may
indicates a course of action permissible within the limits of the document

3.6
need not
indicates a course of action permissible within the limits of the document

3.7
optional
indicates a course of action permissible within the limits of the document

3.8
referencing profile
indicates a profile that owns the definition of this class and can include a reference to this profile in its "Related Profiles" table

3.9
shall
indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

3.10
shall not
indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

3.11
should
indicates that among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required

3.12
should not
indicates that a certain possibility or course of action is deprecated but not prohibited

3.13
ENUMERATE
Refers to WS-MAN ENUMERATE operation as described in Section 8.2 of DSP0226_V1.1 and Section 9.1 of DSP0227_V1.0

3.14
GET

Refers to WS-MAN GET operation as defined in Section 7.3 of DSP00226_V1.1 and Section 7.1 of DSP0227_V1.0

4 Symbols and Abbreviated Terms

4.1
CIM

Common Information Model

4.2
LC

Lifecycle Controller

5 Synopsis

Profile Name: LC Management

Version: 1.2.0

Organization: DCIM

CIM Schema Version: 2.19.1

Central Class: DCIM_LCService

Scoping Class: CIM_ComputerSystem

The LC Management Profile extends the management capability of the referencing profiles by adding the capability to describe lifecycle controller (LC) through its attributes. Each DCIM_LCAttribute derived instance represents an LC configuration-related attribute.

The DCIM_LCService class shall be the Central Class. The DCIM_ComputerSystem class shall be the Scoping Class. The DCIM_LCService instance shall be the Central Instance. The DCIM_ComputerSystem instance shall be the Scoping Instance.

Table 1 identifies profiles that are related to this profile.

Table 1 – Related Profiles

Profile Name	Organization	Version	Relationship
Profile Registration Profile	DMTF	1.0	Mandatory

6 Description

The LC Management Profile describes the LC attribute configuration service and the attributes instances that the service manages. The profile also describes the relationship of the LC attribute service to the Dell profile version information.

Figure 1 represents the class schema for the Lifecycle Controller (LC) Management. The LC service in a managed system is represented by the instance of the DCIM_LCService class. The LC attributes are represented by the DCIM_LCAttribute class derivation: DCIM_LCEnumeration and DCIM_LCString classes.

The LC Management Profile information is represented with the instance of the DCIM_LCRegisteredProfile.

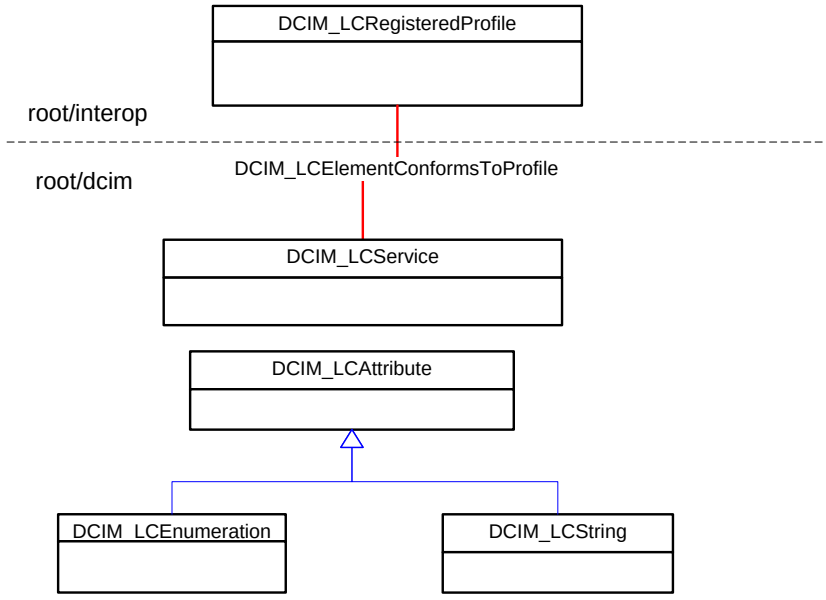

Figure 1 – LC Management Profile: Class Diagram

7 Implementation Requirements

This section describes the implementation of Dell LC Management.

Table 2 – Class Requirements: Power State Management Profile

Element Name	Requirement	Description
Classes		
DCIM_LCService	Mandatory	The class shall be implemented in the Implementation Namespace. See section 7.1.
DCIM_LCEnumeration	Mandatory	The class shall be implemented in the Implementation Namespace. See section 7.2.
DCIM_LCString	Mandatory	The class shall be implemented in the Implementation Namespace. See section 7.3.
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in both the *Interop* and *Implementation Namespaces*. See section 7.1 and 7.4.
DCIM_LCRegisteredProfile	Mandatory	The class shall be implemented in the Interop Namespace. See section 7.4.
Indications		
None defined in this profile		

7.1 DCIM_LCService

This section describes the implementation for the DCIM_LCService class.

This class is instantiated in the Implementation Namespace.

The DCIM_LCElementConformsToProfile association's ManagedElement property shall references the DCIM_LCService instance(s).

7.1.1 Resource URIs for WinRM®

The class Resource URI is:

"http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2 / DCIM_LCService?__cimnamespace=<Implementation Namespace>"

The key properties are the SystemCreationClassName, CreationClassName, SystemName, Name

The instance Resource URI for DCIM_LCService instance is:

"http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LCService?__cimnamespace=<ImplementationNamespace>+SystemCreationClassName=DCIM_ComputerSystem+SystemName=DCIM:ComputerSystem+CreationClassName=DCIM_LCService+Name=DCIM:LCService"

7.1.2 Operations

The following table details the implemented operations on DCIM_LCService.

Table 3 – DCIM_LCService - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
Invoke	Mandatory	Instance URI and Method parameters

7.1.3 Properties

The following table details the implemented properties for DCIM_LCService instance in a system. The "Requirements" column shall denote the implementation requirement for the corresponding property. The "Type" column denotes the corresponding property type. The "Additional Requirement" Column specifies additional information on the property value.

Table 4 – DCIM_LCService - Properties

Property Name	Type	Requirement	Additional Requirement
CreationClassName	String	Mandatory	The property value will be "DCIM_LCService"
Name	String	Mandatory	The property value will be "DCIM:LCService"
ElementName	String	Mandatory	The property value will be "LC Service"
SystemCreationClassName	String	Mandatory	The property value will be "DCIM_ComputerSystem"
SystemName	String	Mandatory	The property value will be "DCIM:ComputerSystem"

7.2 DCIM_LCEnumeration

This section describes the implementation for the DCIM_LCEnumeration class.

This class shall be instantiated in the Implementation Namespace.

7.2.1 Resource URIs for WinRM®

The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCEnumeration?__cimnamespace=<Implementation Namespace>"

The key property shall be the InstanceID.

The instance Resource URI for DCIM_LCEnumeration instance shall be: "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCEnumeration?__cimnamespace=<Implementation Namespace>+InstanceID=<InstanceID>"

7.2.2 Operations

The following table details the implemented operations on DCIM_LCEnumeration.

Table 2 – DCIM_LCEnumeration - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
DCIM_LCService.SetAttributte()	Mandatory	See section 8.1
DCIM_LCService.SetAttributes()	Mandatory	See section 8.2

7.2.3 Properties

The following table details the implemented properties for DCIM_LCEnumeration instance representing a LC enumeration attribute. The “Requirements” column shall denote the implementation requirement for the corresponding property. If the column “Property Name” matches the property name, the property either shall have the value denoted in the corresponding column “Additional Requirement”, or shall be implemented according to the requirements in the corresponding column “Additional Requirement”.

Table 3 – Class: DCIM_LCEnumeration

Properties	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	The property value shall have a unique value.
AttributeName	String	Mandatory	The property value shall be from the “AttributeName” column in Table 4.
CurrentValue	string[]	Mandatory	The property value shall be one of the values in the “PossibleValues” column at the corresponding row in Table 4.
PendingValue	string[]	Mandatory	The property value shall be one of the values in the “PossibleValues” column at the corresponding row in Table 4.
IsReadOnly	boolean	Mandatory	The property value shall the value in the “IsReadOnly” column at the corresponding row in Table 4.
ElementName	string	Mandatory	The property value shall be the FQDD of the LC.
PossibleValues	string	Mandatory	The property value shall be equal to the array of the values in “PossibleValues” column at the corresponding row in Table 4.

The following table describes the requirements for the AttributeName, and PossibleValues properties. The PossibleValues is an array property represented in the table as comma delimited list.

Table 4 – DCIM_LCEnumeration Attributes

AttributeName	Description	IsReadOnly	PossibleValues
Licensed	Whether the Component Configuration Recovery feature is licensed.	True	"Yes", "No"
Part Configuration Update	Part cofiguration update method.	False	"Disabled", "Apply always", "Apply only if firmware match"
Part Firmware Update	Disable (default) = firmware update is not allowed. Allow version upgrade only = Allow firmware update only on up-revision. Match firmware of replaced part = Always update firmware.	False	"Disable", "Allow version upgrade only", "Match firmware of replaced part"
Collect System Inventory on Restart	Disabled (default) = Disable collecting inventory on restart Enabled = Enable collecting system inventory on restart	False	"Disabled", "Enabled"
Auto Discovery	Whether Auto Discovery feature is turned on or off.	False	"On", "Off"
Discovery Factory Defaults	Off (default) = Do not reset to factory defaults when performing auto discovery On = Reset to factory defaults when performing auto discovery.	False	"On", "Off"
IPChangeNotifyPS	On = Notify provisioning server of an IP change. Off = Do not notify provisioning server of an IP change.	False	"On", "Off"
VirtualAddressManagement	Console = Console manages the virtual addresses FlexAddress = Virtual addresses are managed through the flex addressing. **Note**: • If this attribute is configured through console, refer to section "Setting virtual address attributes on CNA" in Simple NIC Profile. • If its value is changed from Console to FlexAddress, then host server should go through two restarts in order for this change to be made.	False	"Console", "FlexAddress"

7.3 DCIM_LCString

This section describes the implementation for the DCIM_LCString class.

This class shall be instantiated in the Implementation Namespace.

7.3.1 Resource URIs for WinRM®

The class Resource URI shall be “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCString?__cimnamespace=<Implementation Namespace>”

The key property shall be the InstanceID.

The instance Resource URI for DCIM_LCString instance shall be:
“http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCString?__cimnamespace=<Implementation Namespace>+InstanceID= <InstanceID>”

7.3.2 Operations

The following table details the implemented operations on DCIM_LCString.

Table 5 – DCIM_LCString - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI
DCIM_LCService.SetAttributte()	Mandatory	See section 8.1
DCIM_LCService.SetAttributes()	Mandatory	See section 8.2

7.3.3 Properties

The following table details the implemented properties for DCIM_LCString instance representing an LC string attribute. The “Requirements” column shall denote the implementation requirement for the corresponding property. If the column “Property Name” matches the property name, the property either shall have the value denoted in the corresponding column “Additional Requirement”, or shall be implemented according to the requirements in the corresponding column “Additional Requirement”.

Table 6 – Class: DCIM_LCString

Properties	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	The property value shall have unique value.
AttributeName	String	Mandatory	The property value shall be from the "AttributeName" column in Table 7.
CurrentValue	string[]	Mandatory	The property value shall match the format described in "Value Expression" column at the corresponding row in Table 7.
PendingValue	string[]	Mandatory	The property value shall match the format described in "Value Expression" column at the corresponding row in Table 7.
IsReadOnly	boolean	Mandatory	The property value shall be the value in the "IsReadOnly" column at the corresponding row in Table 7.
ElementName	string	Mandatory	The property value shall be the FQDD of the LC.
MinLength	uint64	Mandatory	The property value shall be the value in the "MinLength" column at the corresponding row in Table 7.
MaxLength	uint64	Mandatory	The property value shall be the value in the "MaxLength" column at the corresponding row in Table 7.

The following table describes possible DCIM_LCString attributes and the requirements for the AttributeName, MinLength, and MaxLength properties.

The AttributeValue shall be read-only if IsReadOnly property value from the corresponding row in the below table contains "TRUE".

The AttributeValue string shall have equal or lower number of characters than the MaxLength property value from the corresponding row.

The AttributeValue string shall have equal or higher number of characters than the MinLength property value from the corresponding row.

The AttributeValue shall conform to the ValueExpression form from the corresponding row.

Table 7 – DCIM_LCString Attributes

AttributeName	Description	IsReadOnly	MinLength	MaxLength	Value Expression

SYSID	Dell System ID.	TRUE	N/A	N/A	
Provisioning Server	Provisioning server address and port.	FALSE	0	255	Examples: hostname hostname.domain.com 1.1.1.1 Mypc:8080 Myps.dell.com(1.2.3.4):8080 Host1:80,host2:8080 Hostname[2001:db8:0000:1428:57ab]:443 [2001:db8:0000:1428:57ab]:443
VirtualAddressManagementApplication*	The console name of the Virtual Address Management Application, if the DCIM_LCEnumeration VirtualAddressManagement attribute is set to CurrentValue equals “Console”.	FALSE*	0	32	

* - Note that VirtualAddressMangementApplication attribute is settable only if the VirtualAddressManagement DCIM_LCEnumeration instance’s CurrentValue is set to “Console”.

7.4 Lifecycle Controller (LC) Management Registration – DCIM_LCRegistered Profile

This section describes the implementation for the DCIM_LCRegisteredProfile class.

This class shall be instantiated in the Interop Namespace.

The DCIM_LCElementConformsToProfile association(s)’ ConformantStandard property shall reference the DCIM_LCRegisteredProfile instance.

7.4.1 Resource URIs for WinRM®

The class WBEM URI shall be "http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/CIM_RegisteredProfile?__cimnamespace=<Interop Namespace>"

The key property shall be the InstanceID property.

The instance WBEM URI shall be: “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCRegisteredProfile?__cimnamespace=<InteropNamespace>+InstanceID=DCIM:LCManagement:1.1.0”

7.4.2 Operations

The following table details the implemented operations on DCIM_LCRegisteredProfile.

Table 8 – DCIM_LCRegisteredProfile - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

7.4.3 Properties

The following table details the implemented properties for DCIM_LCRegisteredProfile instance representing Lifecycle Controller (LC) Management implementation. The “Requirements” column shall denote the implementation requirement for the corresponding property. If the column “Property” matches the property name, the property either shall have the value denoted in the corresponding column “Additional Requirements”, or shall be implemented according to the requirements in the corresponding column “Additional Requirements”.

Table 9 – Class: CIM_RegisteredProfile

Properties	Type	Requirement	Additional Requirements
InstanceID	string	Mandatory	This property shall have a value of “DCIM:LCManagement:1.1.0”
RegisteredName	string	Mandatory	This property shall have a value of “LC Management”.
RegisteredVersion	string	Mandatory	This property shall have a value of “1.2.0”.
RegisteredOrganization	uint16	Mandatory	This property shall have a value of 1 (Other).
OtherRegisteredOrganization	string	Mandatory	This property shall match “DCIM”
AdvertiseTypes	uint16[]	Mandatory	This property array shall have values “1(Other)” and “1(Other)”
AdvertiseTypeDescriptions	string[]	Mandatory	This property array shall have values “WS-Identify” and “Interop Namespace”

8 Methods

This section details the requirements for supporting intrinsic operations and extrinsic methods for the CIM elements defined by this profile.

8.1 DCIM_LCService.SetAttribute()

The SetAttribute( ) method is used to set or change the value of an LC attribute.

Invocation of the SetAttribute( ) method shall change the value of the DCIM_LCAttribute.CurrentValue or DCIM_LCAttribute.PendingValue property to the value specified by the AttributeValue parameter if the DCIM_LCAttribute.IsReadOnly property is FALSE. Invocation of this method when the DCIM_LCAttribute.IsReadOnly property is TRUE shall result in no change to the value of the DCIM_LCAttribute.CurrentValue property. The results of changing this value is described with the SetResult parameter.

Return code values for the SetAttribute( ) method are specified in Table 10 and parameters are specified in Table 11. Invoking the SetAttribute( ) method multiple times can result in the earlier requests being overwritten or lost.

Table 10 – DCIM_LCService.SetAttribute() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 11 – DCIM_LCService.SetAttribute() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	AttributeName	string	DCIM_LCAttribute.AttributeName
IN, REQ	AttributeValue	string [ ]	Pending or Current value to be set
OUT	SetResult	string	Invoking the SetAttribute may result in the CurrentValue or PendingValue property being set. A value of “Set CurrentValue” means CurrentValue property is set, and a value of “Set PendingValue” means PendingValue property is set.
OUT	RebootRequired	string	A value of “Yes” means a reboot is required to set this value, and a value of “No” means a reboot is not required to set this value
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.2 DCIM_LCService.SetAttributes()

The SetAttributes( ) method is used to set or change the values of a group of attributes.

Invocation of the SetAttributes( ) method shall change the values of the DCIM_LCAttribute.CurrentValue or PendingValue properties that correspond to the names specified by the AttributeName parameter and the values specified by the AttributeValue parameter if the respective DCIM_LCAttribute.IsReadOnly property is FALSE. Invocation of this method when the respective DCIM_LCAttribute.IsReadOnly property is TRUE shall result in no change to the corresponding value of the DCIM_LCAttribute.CurrentValue property.

Return code values for the SetAttributes( ) method are specified in Table 12, and parameters are specified in Table 13.

Invoking the SetAttributes( ) method multiple times can result in the earlier requests being overwritten or lost.

Table 12 – DCIM_LCService.SetAttributes() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 13 – DCIM_LCService.SetAttributes() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	AttributeName	string [ ]	Array of DCIM_LCAttribute.AttributeName
IN, REQ	AttributeValue	string [ ]	Corresponding array of Pending or Current value to be set
OUT	SetResult	string [ ]	invoking the SetAttributes may result in the CurrentValue or PendingValue property of each input element being set. AttributeValue array will have a corresponding SetResult value in the SetResult array. A value of “Set CurrentValue” means CurrentValue property is set, and a value of “Set PendingValue” means PendingValue property is set.
OUT	RebootRequired	string [ ]	Each input element‘s AttributeValue array will have a corresponding RebootRequired value in the RebootRequired array. A value of “Yes” means a reboot is required to set this value, and a value of “No” means a reboot is not required to set this value
OUT	MessageID	string [ ]	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	string [ ]	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.3 DCIM_LCService.CreateConfigJob()

The CreateConfigJob( ) method is used to apply the pending values created by the SetAttribute and SetAttributes methods. The successful execution of this method creates a job for application of pending attribute values.

Return code values for the CreateConfigJob( ) method are specified in Table 14, and parameters are specified in Table 15.

Subsequent calls to CreateConfigJob after the first CreateConfigJob will result in error until the first job is completed.

Table 14 – DCIM_LCService.CreateConfigJob() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 15 – DCIM_LCService.CreateConfigJob() Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.4 DCIM_LCService.ReInitiateDHS()

A method used to reinitiate the provisioning server discovery and handshake.

Table 16 – DCIM_LCService.ReInitiateDHS() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 17 – DCIM_LCService.ReInitiateDHS() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	ProvisioningServer	string	An optional parameter to specify provisioning server addresses and ports used for auto discovery. If omitted, the Lifecycle Controller will get the value from DHCP or DNS
IN, REQ	ResetToFactoryDefaults	boolean	If set to “true”, all configuration information is replaced with the auto discovery factory defaults. If set to “false”, an error will be returned
IN, REQ	PerformAutoDiscovery	uint16	A value of "Off = 1" disables auto discovery. A value of "Now = 2" enables and initiates auto discovery immediately. A value of “NextBoot = 3" will delay reconfiguration and auto discovery until next powercycle.
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.5 DCIM_LCService.ClearProvisioningServer()

A method used to clear the provisioning server values.

Table 18 – DCIM_LCService.ClearProvisioningServer() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 19 – DCIM_LCService.ClearProvisioningServer() Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	MessageID	string	Error MessageID is returned if the method fails to execute
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute

8.6 DCIM_LCService.DownloadServerPublicKey()

A method used to download the server public key to the LC.

Table 20 – DCIM_LCService.DownloadServerPublicKey() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 21 – DCIM_LCService.DownloadServerPublicKey() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, OctetString, REQ	KeyContent	string	Base64 encoded public key content.
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of public key download status
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.7 DCIM_LCService.DownloadClientCerts()

A method used to download the client private certificate, password, and root certificate to LC.

Table 22 – DCIM_LCService.DownloadClientCerts() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 23 – DCIM_LCService.DownloadClientCerts() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, OctetString, REQ	KeyContent	string	Base64 encoded private key content.
IN	Password	string	Private key password
IN, OctetString, REQ	CAConcent	string	Base64 encoded root certificate content
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of public key download status
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.8 DCIM_LCService.DeleteAutoDiscoveryClientCerts ()

This method is called to wipe all configuration from the Lifecycle controller before the system is retired.

Table 24 – DCIM_LCService.DeleteAutoDiscoveryClientCerts() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 25 – DCIM_LCService.DeleteAutoDiscoveryClientCerts() Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	MessageID	string	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	string	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.9 DCIM_LCService.SetCertificateAndPrivateKey()

This method is used to update iDRAC certificate and private key pairs using the contents of a PKCS#12 file.

Table 26 – DCIM_LCService.SetCertificateAndPrivateKey() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 27 – DCIM_LCService.SetCertificateAndPrivateKey() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	Type	string	This parameter specifies the service the certificate is for. “server” = web server
IN, REQ	PKCS12	string	An input parameter that represents the Base64 encoded contents of PKCS#12 file to upload. Note this is the contents of the file and not a filename.
IN, REQ	PKCS12pin	string	Password to decode the PKCS12
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.10 DCIM_LCService.SetPublicCertificate()

This method is used to update a public SSL Certificate on the iDRAC.

Table 28 – DCIM_LCService.SetPublicCertificate() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 29 – DCIM_LCService.SetPublicCertificate() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	Type	string	This parameter specifies the service the certificate is for. "directoryCA" = CA certificate for Active Directory or LDAP server
IN, REQ	Certificate	string	An input parameter that represents the certificate to upload. The certificate must be in X509 format and Base64 encoded.
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.11 DCIM_LCService.DeleteAutoDiscoveryServerPublicKey()

This method is used to delete the server public key set previously by the auto discovery method.

Table 30 – DCIM_LCService.DeleteAutoDiscoveryServerPublicKey() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 31 – DCIM_LCService.DeleteAutoDiscoveryServerPublicKey () Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.12 DCIM_LCService.InsertCommentInLCLog()

This method is used to insert additional user comments into the Lifecycle Controller log.

Table 32 – DCIM_LCService.InsertCommentInLCLog() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 33 – DCIM_LCService.InsertCommentInLCLog() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	Comment	string	This parameter holds the text that will be inserted into the LC log
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.13 DCIM_LCService.ExportLCLog()

This method is used to export the log from the Lifecycle Controller to a file on a remote share.

Table 34 – DCIM_LCService.ExportLCLog() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 35 – DCIM_LCService.ExportLCLog() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server
IN, REQ	ShareName	string	The directory path to the mount point
IN, REQ	FileName	string	The target output file name
IN	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	Username for the target export server
IN	Password	String	Password for the target export server
IN	Workgroup	String	The applicable workgroup
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.14 DCIM_LCService.ExportHWInventory()

This method is used to export the hardware inventory from the Lifecycle Controller to a file on a remote share.

Table 36 – DCIM_LCService.ExportHWInventory() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 37 – DCIM_LCService.ExportHWInventory() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server
IN. REQ	ShareName	string	The directory path to the mount point
IN, REQ	FileName	string	The target output file name
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	Username for the target export server
IN	Password	String	Password for the target export server
IN	Workgroup	String	The applicable workgroup
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.15 DCIM_LCService.ExportFactoryConfiguration()

This method is used to export the factory configuration from the Lifecycle Controller to a file on a remote share.

Table 38 – DCIM_LCService.ExportFactoryConfiguration() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 39 – DCIM_LCService.ExportFactoryConfiguration() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN, REQ	IPAddress	string	The IP address of the target export server
IN, REQ	ShareName	string	The directory path to the mount point
IN, REQ	FileName	string	The target output file name
IN, REQ	ShareType	uint16	Type of share: NFS=0, CIFS=2
IN	Username	String	Username for the target export server
IN	Password	String	Password for the target export server
IN	Workgroup	String	The applicable workgroup
OUT	Job	CIM_ConcreteJob REF	Returned to keep track of config job status
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.16 DCIM_LCService.LCWipe()

This method is called to delete all configurations from the Lifecycle controller before the system is retired.

Table 40 – DCIM_LCService.LCWipe() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	Job started: REF returned to started CIM_ConcreteJob

Table 41 – DCIM_LCService.LCWipe() Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.17 DCIM_LCService.BackupImage()

This method is used to export system profile by backing up the firmware and saving configurations for the Lifecycle Controller. The successful method execution shall export only the current values of the settable attributes in the BIOS and Boot Management, Simple NIC, RAID, Lifecycle Controller (LC) Management, and IDRAC profiles. Note that settings that are NOT settable through these attributes shall NOT be exported.

Table 42 – DCIM_LCService.BackupImage() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	A DCIM_ConcreteJob is returned

Table 43 – DCIM_LCService.BackupImage() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	IPAddress	String	IP address of the NFS or CIFS share such as 192.168.10.12. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	ShareName	String	Share name for the network share such as “imageshare”. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	ShareType	Unit16	Type of the share or storage. “0”: NFS “2”: CIFS “4”: VFLASH If ShareType is blank or null, it will be considered as NFS type
IN	Passphrase	String	The passphrase for the image. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	ImageName	String	The name of the backup file. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	Username	String	Username for the remote share
IN	Password	String	Password for the remote share
IN	Workgroup	String	Workgroup for the share
IN	ScheduledStartTime	String	The scheduled start time
IN	UntilTime	String	The maintenance time. Job will not run passing this window.
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Job	DCIM_ConcreteJob Ref	The job that represents this operation
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.18 DCIM_LCService.RestoreImage()

This method is used to import System Profile by restoring the firmware and configurations for the Lifecycle Controller. The successful method execution shall import only the values of the settable attributes in the BIOS and Boot Management, Simple NIC, RAID, Lifecycle Controller (LC) Management and IDRAC Card profiles. Note that settings that are NOT settable through these attributes shall NOT be imported.

Table 44 – DCIM_LCService.RestoreImage() Method: Return Code Values

Value	Description
1	Method is unsupported.
2	Error occurred
4096	A DCIM_ConcreteJob is returned

Table 45 – DCIM_LCService.RestoreImage() Method: Parameters

Qualifiers	Name	Type	Description/Values
IN	IPAddress	String	IP address of the NFS or CIFS share. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	ShareName	String	Share name for the network share. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	ShareType	Uint16	Type of the share or storage. "0": NFS "2": CIFS "4": VFLASH If ShareType is blank or null, it will be considered as NFS type
IN	Passphrase	String	The passphrase for the image. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	ImageName	String	The name of the backup file. The parameter shall be required, if the ShareType parameter has value 0 (NFS), or 2 (CIFS) or not specified.
IN	Username	String	Username for the remote share
IN	Password	String	Password for the remote share
IN	Workgroup	String	Workgroup for the share
IN, REQ	PreserveVDConfig	Uint16	Whether to preserve the VD config.
IN	ScheduledStartTime	String	The scheduled start time
IN	UntilTime	String	The maintenance time. Job will not run passing this window. For example, if an update is scheduled to run at 2:00 am and have an UntilTime equal to 2:30am. If the system does not reboot after 2:30 am then this job will be marked as Failed – Time Elapsed.
OUT	Job	DCIM_ConcreteJob Ref	The job that represents this operation
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute

Qualifiers	Name	Type	Description/Values
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

8.19 DCIM_LCService.GetRSStatus()

This method is used to get the Data Manager Status.

Table 46 – DCIM_LCService.GetRSStatus() Method: Return Code Values

Value	Description
0	Request was successfully executed.
1	Method is unsupported.
2	Error occurred

Table 47 – DCIM_LCService.GetRSStatus() Method: Parameters

Qualifiers	Name	Type	Description/Values
OUT	DMStatus	String	The status for the Data Manager: Ready Not Ready Reloading
OUT	MessageID	String	Error Message ID- can be used to index into Dell Message registry files
OUT	Message	String	Error Message in English corresponding to MessageID is returned if the method fails to execute
OUT	MessageArguments	string[]	Substitution variables for dynamic error messages

9 Use Cases

This section contains object diagrams and use cases for the LC Management Profile.

Note that URIs in this section are in form of Resource URIs for WinRM®.

9.1 Discovery of LC Management profile support

Use one of the two procedures below to confirm the existence of LC Management profile support

A) GET the *DCIM_LCRegisteredProfile* instance using an *InstanceID* of DCIM:LCManagement:1.1.0. See section 3.14 for a definition of GET.

Instance URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LCRegisteredProfile?__cimnamespace=root/interop+InstanceID=DCIM:LCManagement:1.1.0

Results for the *InstanceID* of DCIM:LCManagement:1.1.0 shown below. If no instance is returned, the profile is not supported.

DCIM_LCRegisteredProfile
AdvertiseTypeDescriptions = WS-Identify, Interop Namespace
AdvertiseTypes = 1, 1
InstanceID = DCIM:LCManagement:1.1.0
OtherRegisteredOrganization = DCIM
RegisteredName = LC Mangement
RegisteredOrganization = 1
RegisteredVersion = 1.1.0

B) ENUMERATE the *CIM_RegisteredProfile* class. See section 3.13 for a definition of ENUMERATE .

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/CIM_RegisteredProfile?__cimnamespace=root/interop

Then query the result for the following properties:

RegisteredName = LC Management, OtherRegisteredOrganization = DCIM, RegisteredVersion = 1.1.0

9.2 Inventory of LC Management attributes in system

ENUMERATE the *DCIM_LCEnumeration* class to view all available instances of the class

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LCEnumeration?__cimnamespace=root/dcim

The instance information of all available LC Management attributes will be returned

9.3 Get "Collect System Inventory on Restart" (CSIOR) attribute

The URI for getting particular instance information is deterministic (i.e the *InstanceID* will be unique for each instance)

GET the *DCIM_LCEnumeration* instance using an *InstanceID* of DCIM_LCEnumeration:CCR5. See section 3.14 for a definition of GET .

Class URI:

http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCEnumeration?__cimnamespace=root/dcim+InstanceID=DCIM_LCEnumerati

on:CCR5 http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_NICAttribute?__cimnamespace=root/dcim

The instance containing the attribute will be returned.

9.4 Get "Part Firmware Update" attribute

The URI for getting particular instance information is deterministic (i.e the *InstanceID* will be unique for each instance)

GET the *DCIM_LCEnumeration* instance using an *InstanceID* of DCIM_LCEnumeration:CCR4. See section 3.14 for a definition of GET.

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LCEnumeration?__cimnamespace=root/dcim+InstanceID=DCIM_LCEnumeration:CCR4 http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_NICAttribute?__cimnamespace=root/dcim

The instance containing the attribute will be returned.

9.5 Check VFlash license enablement

The URI for getting particular instance information is deterministic (i.e the *InstanceID* will be unique for each instance)

GET the *DCIM_LCEnumeration* instance using an *InstanceID* of DCIM_LCEnumeration:CCR1. See section 3.14 for a definition of GET.

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/DCIM_LCEnumeration?__cimnamespace=root/dcim+InstanceID=DCIM_LCEnumeration:CCR1 http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_NICAttribute?__cimnamespace=root/dcim

The instance containing the attribute will be returned.

9.6 Setting attributes

A) ENUMERATE the *DCIM_LCEnumeration* class as shown in Section 9.2 and identify the applicable instances

B) To invoke the SetAttribute() or SetAttributes() method, extract the instance information from A) and construct the input parameters per Table 11 and Table 13.

C) INVOKE the SetAttribute() or SetAttributes() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSyst

em+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

D) Examine output parameters per Table 11 and Table 13

E) Apply the pending values per Section 9.7

F) Repeat A) and examine the applicable instances to confirm successful execution of the method

9.7 Apply pending values

A) To invoke the CreateConfigJob( ) method, construct input parameters per Table 15

B) INVOKE CreateConfigJob( ) method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) The job will be scheduled to run.

D) Query the status of the *jobID* output using the job control profile methods

9.8 Set Configuration to Auto Discovery Factory Defaults

A) To invoke the ReInitiateDHS() method, construct the input parameters per Table 17

B) INVOKE the ReInitiateDHS() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) Examine output parameters per Table 17

D) List LC Management inventory, per section 9.2, to confirm successful execution of the method

9.9 Clear provisioning server

A) To invoke the ClearProvisioningServer() method, construct the input parameters per Table 19

B) INVOKE the ClearProvisioningServer() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSyst

em+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) Examine output parameters per Table 19

9.10 Replace auto discovery public key

A) Replace the auto discovery Server public key using the DownloadServerPublicKey() method, construct the input parameters per Table 21

B) INVOKE the DownloadServerPublicKey() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) A job will be scheduled to run immediately, reference to this job is returned by the INVOKE method.

D) Query the status of the *jobID* output using the job control profile methods.

9.11 Replace auto discovery client certificate, private key and password

A) Replace auto discovery client certificate, private key and password using the DownloadClientCerts() method, construct the input parameters per Table 23

B) INVOKE the DownloadClientCerts() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) A job will be scheduled to run immediately, reference to this job is returned by the INVOKE method.

D) Query the status of the *jobID* output using the job control profile methods.

9.12 Delete auto discovery public key

A) Delete the auto discovery server public key using the DeleteAutoDiscoveryServerPublicKey() method, construct the input parameters per Table 31

B) INVOKE the DeleteAutoDiscoveryServerPublicKey () method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

9.13 Delete auto discovery client certificate, private key and password

A) Delete the auto discovery client certificate, private key and password using the DeleteAutoDiscoveryClientCerts() method, construct the input parameters per Table 25

B) INVOKE the DeleteAutoDiscoveryClientCerts() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

9.14 Replace iDRAC Web Server client certificate and private key

A) Replace the iDRAC Web Server client certificate and private key using the SetCertificateAndPrivateKey() method, construct the input parameters per Table 27

B) INVOKE the SetCertificateAndPrivateKey() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

9.15 Replace iDRAC Web Server public certificate

A) Replace the iDRAC Web Server public certificate using the SetPublicCertificate() method, construct the input parameters per Table 29

B) INVOKE the SetPublicCertificate() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

9.16 Insert comment into Lifecycle log

A) To invoke the InsertCommentInLCLog() method, construct the input parameters per Table 33

B) INVOKE the InsertCommentInLCLog() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) Examine output parameters per Table 33

9.17 Export and view the content of the Lifecycle log

A) To invoke the ExportLCLog() method, construct the input parameters per Table 35

B) INVOKE the ExportLCLog() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) Examine output parameters per Table 35

9.18 Export and view the current hardware inventory

A) To invoke the ExportHWInventory() method, construct the input parameters per Table 37

B) INVOKE the ExportHWInventory() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) Examine output parameters per Table 37

9.19 Export and view the hardware inventory as shipped from the factory

A) To invoke the ExportFactoryConfiguration() method, construct the input parameters per Table 39

B) INVOKE the ExportFactoryConfiguration() method

Class URI:

http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService

C) Examine output parameters per Table 39

10 CIM Elements

No additional requirements have been defined.

ANNEX A
(informative)

Related MOF Files

Dell Tech Center MOF Library:

http://www.delltechcenter.com/page/DCIM.Library.MOF

Related Managed Object Format (MOF) files:

DCIM_LCAttribute.mof

DCIM_LCElementConformsToProfile.mof

DCIM_LCEnumeration.mof

DCIM_LCRegisteredProfile.mof

DCIM_LCService.mof

DCIM_LCString.mof